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REMARKS

The Examiner has objected to the Abstract. Applicant has clarified the abstract to avoid such objection.

The Examiner has rejected Claims 12 and 27 under 35 U.S.C. 112, second paragraph, as being indefinite. Applicant has cancelled such claims in order to render such rejection moot.

The Examiner has rejected Claims 1-11, 13-14, 16-26, 28-29, 31-33, 35, 38, 41-42, 44, 47 and 50 under 35 U.S.C. 102(e) as being anticipated by Maher, III et al. (U.S. Patent No. 6,381,242). Applicant respectfully disagrees with such rejection, especially in view of the amendments made hereinabove to each of the independent claims.

With respect to independent Claims 1 and 16, the Examiner has relied on the following excerpts from Maher to make a prior art showing of applicant's claimed "network interface passively monitoring a transient packet stream at a network boundary" (see the same or similar, but not identical language in each of the foregoing claims).

"Network apparatus 100 accepts data from the line by means of input physical interface 102. Input physical interface 102 can consist of a plurality of ports, and can accept any number of network speeds and protocols, including such high speeds as OC-3, OC-12, OC-48, and protocols including 10/100 Ethernet, gigabit Ethernet, and SONET. Input physical interface 102 takes the data from the physical ports, frames the data, and then formats the data..." (Col. 5, lines 46-54-emphasis added)

"QoS processor 116 is operable to perform the traffic flow management for the stream of data packets processed by network apparatus 100." (Col. 7, lines 13-15-emphasis added)

Applicant respectfully asserts that such excerpts do not meet applicant's specific claim language. In particular, Maher teaches taking data from physical ports, framing the data, and formatting the data along with a processor that performs traffic flow management (see emphasized excerpts above). Clearly, acting on data, as described in

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Maher, does not meet applicant's claimed "passively monitoring a transient packet stream at a network boundary."

Still with respect to independent Claims 1 and 16, the Examiner has relied on the following excerpt from Maher to make a prior art showing of applicant's claimed "packet receiver reassembling one or more of the incoming datagrams into a segment structured in compliance with a transport protocol layer" (see the same or similar, but not identical, language in each of the foregoing claims).

"The data is first sent to header preprocessor 104, which is operable to perform several operations using information contained in the data packet headers. Header preprocessor 104 stores the received data packets in packet storage memory 106 and scans the header information. The header information is scanned to identify the type, or protocol, of the data packet, which is used to determine routing information and to decode the IP header starting byte. As will be discussed below, network apparatus 100, in order to function properly, needs to reorder out of order data packets and reassemble data packet fragments." (Col. 5, line 60-Col. 6, line 4)

Applicant respectfully asserts that such excerpt generally teaches that the network apparatus "need[s] to reorder out of order data packets and reassemble data packet fragments" (see emphasized excerpt). However, such excerpt does not teach that the "one or more datagrams [are reassembled] into a segment structured in compliance with a transport layer protocol," as specifically claimed by applicant (emphasis added).

With respect to independent Claims 32 and 41, the Examiner has relied on the same rejections with respect to independent Claim 1 to meet applicant's claim language. However, applicant notes that the excerpts in Maher relied by the Examiner fail to disclose any sort of "receiving copies of datagrams," let alone "into an incoming packet queue," as claimed by applicant (emphasis added).

Also with respect to independent Claims 32 and 41, the Examiner has again relied on Col. 5, line 60-Col. 6, line 4 in Maher to make a prior art showing of applicant's claimed "packet receiver reassembling one or more such datagrams from the incoming

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packet queue into network protocol packets, each staged in a reassembled packet queue” (see the same or similar, but not identical, language in each of the foregoing claims). However, applicant again notes that such excerpt does not specifically teach “reassembling one or more such datagrams...into network protocol packets,” as claimed by applicant (emphasis added). In addition, nowhere in the Maher reference is there any disclosure of staging each reassembled datagram “in a reassembled packet queue,” in the manner specifically claimed by applicant.

The Examiner is reminded that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, the identical invention must be shown in as complete detail as contained in the claim. *Richardson v. Suzuki Motor Co.* 868 F.2d 1226, 1236, 9USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

This criterion has simply not been met by the Maher reference, as noted above. Nevertheless, despite such paramount deficiencies and in the spirit of expediting the prosecution of the present application, applicant has substantially, but not identically, incorporated the subject matter of Claim 11 into each of the independent claims.

With respect to Claim 11 et al., substantially incorporated into each of the independent claims, the Examiner has relied on Col. 7, lines 18-30 in Maher to make a prior art showing of applicant’s claimed “protocol-specific module processing each reassembled datagram based on the transport protocol layer employed by the reassembled datagram” (see the same or similar, but not identical language in each of the independent claims). Applicant respectfully asserts that such excerpt teaches “assign[ing] the data packet to one of [the Qos processor’s] internal quality of service queues 132 based on the conclusion [of the header preprocessor and/or the content processor].”

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In addition, the only protocol mentioned in the context of the Maher excerpt relied on by the Examiner relates to a protocol of a data packet (see Col. 5, lines 65-66). Clearly, simply assigning a packet to a queue and/or determining a protocol of a data packet, as in Maher, does meet applicant's claimed specific claim language, namely "processing each reassembled datagram based on the transport protocol layer employed by the reassembled datagram" (emphasis added – see Claims 1 and 16) and "plurality of protocol-specific modules process each reassembled datagram based on an upper protocol layer employed by the reassembled datagram" (see Claims 32 and 41).

Since the Maher reference fails to meet each element in applicant's claims, as noted above, a notice of allowance or a specific prior art showing of each of the foregoing claimed features, in combination with the remaining claimed features, is respectfully requested.

Applicant further notes that the prior art is also deficient with respect to the dependent claims. For example, with respect to Claim 3 et al., the Examiner has relied on Col. 5, line 65-Col. 6, line 1 to make a prior art showing of applicant's claimed "network protocol-specific decoder [that] decod[es] the reassembled segment prior to scanning." Applicant respectfully asserts that such excerpt merely teaches decoding the IP header starting byte, and NOT the reassembled segment, as specifically claimed by applicant. In addition, the IP header starting byte is decoded before being sent to the content processor, which reassembles the data packet (see Col. 6, lines 8-12), and NOT decoding the already reassembled segment prior to scanning, in the manner claimed by applicant.

With respect to Claim 4 et al., the Examiner has relied on Col. 7, lines 30-33 in Maher to make a prior art showing of applicant's claimed technique "wherein the antivirus scanner terminates the transient packet stream if the reassembled segment is not infected with at least one of a computer virus and malware." Applicant respectfully asserts that such excerpt, however, teaches selectively discarding "[i]nformation in queues that do not have the available bandwidth to transmit all the data currently residing in the queue." Clearly, discarding information based on an available bandwidth, as in

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Maher, does not meet any sort of “terminat[ing] the transient packet stream if the reassembled segment is not infected with at least one of a computer virus and malware,” as claimed by applicant (emphasis added).

Also, with respect to Claim 6 et al., the Examiner has relied on Col. 10, lines 42-46 in Maher to make a prior art showing of applicant’s claimed technique “wherein the action comprises at least one of logging an infection; generating a warning; spoofing a valid datagram in place of the infected datagram; and acquiescing to the infection.” Applicant respectfully asserts that such excerpt in Maher only teaches that “the content processor can act to alter the bits of [an] infected attachment essentially rendering the email harmless” (emphasis added). Clearly, altering the bits of an infected attachment does not meet applicant’s specific claim language, namely “logging an infection; generating a warning; spoofing a valid datagram in place of the infected datagram; and acquiescing to the infection.”

Again, a notice of allowance or a specific prior art showing of all of applicant’s claim limitations, in combination with the remaining claim elements, is respectfully requested.

Still yet, applicant brings to the Examiner’s attention the subject matter of new Claims 51-55 below, which are added for full consideration:

“wherein the network protocol packets employ at least one of HTTP, FTP, SMTP, POP3, NNTP, and Gnutella network protocols” (see Claim 51);

“wherein only datagrams compliant with IP protocol are reassembled” (see Claim 52);

“wherein the antivirus scanner includes a plurality of protocol-specific scanning submodules, each protocol-specific scanning submodule designated for scanning network protocol packets of a particular protocol” (see Claim 53);

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"wherein the protocol-specific submodules include an HTTP submodule, an FTP submodule, an SMTP submodule, and an NNTP submodule" (see Claim 54); and

"wherein the incoming datagrams include IP datagrams that are reassembled into TCP segments" (see Claim 55).

Thus, all of the independent claims are deemed allowable. Moreover, the remaining dependent claims are further deemed allowable, in view of their dependence on such independent claims.

Reconsideration is respectfully requested.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1351 (Order No. NAI1P393/01.162.01).

Respectfully submitted,  
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